TO: Randy Jacobson, Ph.D., Science Officer

Ocean Science Directorate of the Office of Naval Research

Code 1125 GG, Arlington, VA 22217-5003

FROM: Marianne George, Ph.D. and Dr. David Lewis

Co-Directors/Principal Investigators

Grant # NOOO14-91-4151 Box 2224, Lihue, HI 96766

DATE: 10 Nov, 1994

Mg



RE: Annual Report Summarizing Progress of the Subsistence Science and Video Project (SSVP) during 10/1/93 - 10/16/94

The third and final year of the pilot Subsistence Science and Video Project (SSVP) had many key successes. The centerpiece of the year was establishment of an experiential field camp which allowed a more meaningful test of the "integrated" learning concept focused on subsistence knowledge and issues. Most of the 1994 workshop and program aims were achieved. There were also some significant problems, which were very instructive.

The workshop was held at an ideal fieldsite - logistically accommodating and culturally meaningful. The timing - July 17 - 24 - was good for community support and weather.

# The Curriculum and University Course Co-Instructors

The university science curriculum, course plan, and workbook were solid accomplishments. The workbook was more relevant and focused than the two previous products. Marine mammal, island flora, and ocean/island ecology subjects were well organized and of intense interest to the participants. The scientific information and the scope for critical thinking provided for, were on the cutting edge of both Bering Sea science and subsistence issues.

Workbook topics included the formation of St. Lawrence Island, systems of classifying organisms, principles of ecology, seasonal dynamics of subsistence hunting and gathering, flora of St. Lawrence Island, ecology of near shore fishes, and ecology and management of walruses, and incidentally, seals.

In addition to creation of these materials, the university course instructor demonstrated a high level of both cross-cultural awareness and temperamental suitedness to deal with fieldcamp and village realities during the workshop.

Invaluable expertise and theoretical perspectives were provided by ten elders, two of whom were completely new to the SSVP program, and three of whom came from Gambell. These elder-instructors made formal and informal presentations in the areas of marine mammal management, walrus hunting, dressing and cooking animals, skin sewing, gathering and preserving of edible plants, geology, methods for longevity and health, spirituality, reindeer herding, and storytelling. Their critiques of modern scientific knowledge and methods of gaining knowledge of subsistence resources were penetrating.

In addition to their subsistence knowledge, the elders contibuted by setting a positive tone, and rising to every occasion as needed to keep the workshop on track. Their acumen for learning, their wisdom and patience, and the ways they fostered and demonstrated determination and optimism, were essential to the success of the program.

The I.R.A. liaison was, once again, a major strength of the 1994 workshop as a key

facilitator. While not technically an elder, he instructed all the youths who attended the camp, provided a bridge cross-culturally, as well as being the main Yupik/English language translator. He was personally involved in most of the activities and that occured during the workshop. He was also directly responsible for successful field camp selection and arrangements, workshop planning and logistics, as well as recruitment of, and support for, some of the most highly esteemed elder-instructors on the island.

## Workshop Participants from Off-Island

Five SSVP consultants came from offisland to participate in the workshop.

The primary co-director traveled from her present fieldwork site in Hawaii. The university marine science instructor, who resides in Fairbanks, traveled from a field site in S.E. Alaska. The SSVP liaison, recordskeeper, and computertrainer, traveled from her residence and worksite in Anchorage, as did the videographer. The Director-in-training travelled from Nome. In addition to the SSVP consultants, a photographer came from Anchorage supported by the bush newspapers she represented, and by prior agreement with the I.R.A. liaison.

The Director-in-Training was of Siberian Yupik heritage. Though she has resided in Nome most of her life, she lived in Savoonga for several years as a child. She intends to live there again after completing her university education, and aspires to initiate and direct educational/cultural programs like the SSVP.

The Director-in-Training received excellent experiential and administrative introduction to the successes, problems, and promise of the workshop and the project. A pool of similarly and more qualified young adults was identified during the year. These young people are intensely interested in such programs, and they are the most academically qualified and available on the island.

The SSVP liaison/recordskeeper was able to perform documentation and transactions with the Savoongan sponsor organization and the participants during the workshop which enabled accurate and timely submissions to the university business office.

The videographer was technically adequate, and was appreciated for being personally approachable and professionally helpful, especially with the young people who were interested in learning about the video equipment during the workshop, and about the editing process in the studio.

# The Student and Commmunity Participants

There were about 10 young people and adult community members who lent considerable logistical support to the workshop on both paid and volunteer bases. 25 to 30 persons slept at the camp throughout the workshop. Additionally a total of approximately 30 children and adults from Savoonga visited the camp from Savoonga. Two Russian Eskimo children were too young to be students in the workshop. But they and their chaperones participated in some of the workshop events, and their awareness of, and enthusiasm for, the program will be an aid to future participation of Russian Eskimos students and elder/instructors.

Several young people, aged 15 - 19, were regarded as students, though they remained unregistered for course credit, and only attended two or three days of the workshop at the camp. Several of the young people who attended irregularly were recruited specifically because they were regarded as being 'at risk.' Their participation, even though mostly unfocused, was seen by the community as an important accomplishment.

workshop to future

remained the camp. they were een by the Availability Codes

Availability Codes

Special

In contrast to previous years, there were only two young people who formally registered for university credit. One of them completed the coursework during the workshop, and the other received an incomplete. On the other hand, there was a high rate of informal `drop-in' participation and interest, especially by younger children.

# After the Workshop - Followup and Publication

The outstanding workshop student, the Director-in-Training, and the I.R.A. liaison spent a very productive five days in Anchorage participating in the three-year summary, video production/editing process, doing translation work, and studying the various aspects of the SSVP mission and administration.

The summary, one-hour documentary product is being produced by the only Native owned and operated TV production company in Alaska. This facilitated production of a more cross-culturally valid and educational product, and will result in statewide and national distribution of that product. She was willing to work within the very minimal budget.

Full participant cooperation was given to taping during the workshop, and the TV product is anticipated to convey the workshop aims and experiences from the Native point of view, fulfilling the broad educational aims of this final year. The previous two years of footage were digitized for permanent preservation of those most valuable, but unstable, recordings.

Project evaluations were produced by all key program staff. An outside evaluation is being conducted by one of the most internationally qualified and experienced experts in both Native Education and Native Science Education areas, assisted by a graduate student, who taught science in Eskimo villages and has initiated experiential education projects for several years.

The widest possible publication and distribution of workshop information and videotapes is being and will be accomplished. Newspaper and TV coverage of the workshop has already been extensive, and national TV airings of the final video product is scheduled. A photo album and photo prints have been provided to workshop participants and for public display. Descriptive articles will be submitted to appropriate Native education and science education publications, including journals. These have been drafted during the program period, but will not, in most cases, be published, or even submitted, until well after the program end.

## 1993 - 94 Problems

Student recruitment to the accredited science course did not meet expectations this year, for multiple reasons. The I.R.A. liaison did not adequately advise or recruit students for the SSVP during the months and weeks prior to the workshop. However, the initiation of a fieldcamp setting for the workshop made this, in many ways, like a first year, starting up drill, and the organizational and logistical problems were formidable. Also, it had not been fully anticipated by anyone that because the students from previous workshops had graduated from high school, many of them were so concerned with earning money (to be able to go, or return to, universities), that they were not able to participate as they had before without comparable pay. Most felt that "this year those same students we had before were too old for this."

Furthermore, and perhaps most significantly, a strong emphasis was placed on including young people who were not expected to do as well academically as the students in the previous two workshops, but who were perceived by the community to be most in need of positive educational experiences with elders and science experts.

Computer training went largely unfulfilled, only because the trainee that was recruited had a family health emergency which took her to the hospital in Nome on the day the workshop began.

Three administrative problems deserve note:

1) Two new consultants had to be recruited because the previous videographer/instructor/producer died in a plane crash, and the previous science instructor had to be let go for reasons stated in the 1993 annual report.

In each case, excellent replacements were recruited.

2) Yet another new regimen had to be worked out between the project with the Alaska Pacific University. The Director of grants, and the Chair of Natural Sciences were let go suddenly as part of a shutdown of academic and administrative departments. Eventually it became more efficient than it had been when there was a grants officer. But once again a lot of extra labor went into making things work for the SSVP.

3) Special self-audits were necessary to show the need for, and then work with (assist) the A.P.U. business office in reviewing and correcting records. The new director of the A.P.U. business office was forthright and professional. Once aware of the problems, she corrected errors that had occured under the departed grants director.

Communication and understanding between the off-island SSVP consultants and the I.R.A. liaison was problematic. The reasons included the distances between them, cross-cultural differences, inadequacy and expense of telephone communications (and lack of e-mail options). It was too easy for misunderstandings to grow - especially when most participants are unaware of the work required in grant administrations. These are chronic problems, and will remain so until primary leadership and administration of SSVP or similar projects can be learned and performed by local Eskimos.

### Recommendations

The need for local control and empowerment is critical. Education of youth in subsistence science knowledge and issues are top priorities in the Native community, and the St. Lawrence Island community supported all the aims of the SSVP. But for any such program to succeed, a steady and substantive increase in local control is essential.

Specifically, the 1994 program highlighted the need for.

1) Extensive involvement of Siberian Yupik Eskimo young adults and university students in leadership roles, and in communication with the community and the students, and these personnel should include more females, Gambellites and Russians

2) Targeting/inclusion of younger students - ages 12 - 15

- 3) Development of appropriate and meaningful standards and instruments for program evaluation
- 4) More personnel and more compensation for leadership roles and responsibilities within the community.

For other information from the SSVP grant file, contact M. George, Box 2224, Lihue, HI 96766. DRAFT 30 Oct, 1994

# 1993 - 94 Budget Narrative for the Direct Program

#### A. Consultants:

The consultant expenditures were as budgeted, with some minor adjustments occuring within the category to compensate for work that ended up being done by one qualified consultant rather than another. For example, the Director in Training could not do work prior to the workshop, so one of the Directors did it, and the clerical support to direct project was paid to A. Slingluff, who did much extra work in order to correct records of the former grants administrator.

## B. Fringe:

The field insurance was less than anticipated.

## C. Permanent Equipment:

These monies were applied to appropriate video production maintenance costs. The permanent equipment in the village was not increased because it was not needed as much as maintenance and use costs of the production equipment.

## D. Expendable Supplies & Equipment:

The expenditures were as budgeted, except that communications costs were higher than budgeted, mostly because of the necessity of prolonged communications with A.P.U. over budgetary records. Another big factor was that it still proved impractical for the Savoongan consultants to use computer e-mail.

## E. Travel/Per Diem:

Travel costs were as budgeted.

## F. Data Publication:

Publication costs were as budgeted. However the journal publication efforts, and concomitant costs, will continue long after this grant ends.

### H. Miscellaneous:

The video production costs were as budgeted. About half of the real cost of the studio production and rental equipment was donated.

The unused tuition money was used for publication and distribution of project results.

#### I. Indirect:

The rate was fifteen percent of the direct costs, as budgeted.





# OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION) DEFENSE TECHNICAL INFORMATION CENTER CAMERON STATION ALEXANDRIA, VIRGINIA 22304-6145

IN REPLY REFER TO

DTIC-OCC

SUBJECT: Distribution Statements on Technical Documents

OFFICE OF NAVAL RESEARCH CORPORATE PROGRAMS DIVISION

TO:

ONR 353

800 NORTH QUINCY STREET ARLINGTON, VA 22217-5660

- 1. Reference: DoD Directive 5230.24, Distribution Statements on Technical Documents, 18 Mar 87.
- 2. The Defense Technical Information Center received the enclosed report (referenced below) which is not marked in accordance with the above reference.

ANNUAL REPORT N00014-91-4151 TITLE: SUBSISTENCE SCIENCE AND VIDEO PROJECT

- 3. We request the appropriate distribution statement be assigned and the report returned to DTIC within 5 working days.
- 4. Approved distribution statements are listed on the reverse of this letter. If you have any questions regarding these statements, call DTIC's Cataloging Branch, (703) 274-6837.

FOR THE ADMINISTRATOR:

1 Encl

**GOPALAKRISHNAN NAIR** Chief, Cataloging Branch

FL-171 **Jul 93** 

#### **DISTRIBUTION STATEMENT A:**

APPROVED FOR PUBLIC RELEASE: DISTRIBUTION IS UNLIMITED

#### **DISTRIBUTION STATEMENT B:**

DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; (Indicate Reason and Date Below). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office Below).

### **DISTRIBUTION STATEMENT C:**

DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS; (Indicate Reason and Date Below). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office Below).

### DISTRIBUTION STATEMENT D:

DISTRIBUTION AUTHORIZED TO DOD AND U.S. DOD CONTRACTORS ONLY; (Indicate Reason and Date Below). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office Below).

### **DISTRIBUTION STATEMENT E:**

DISTRIBUTION AUTHORIZED TO DOD COMPONENTS ONLY; (Indicate Reason and Date Below). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office Below).

#### **DISTRIBUTION STATEMENT F:**

FURTHER DISSEMINATION ONLY AS DIRECTED BY (Indicate Controlling DoD Office and Date Below) or HIGHER DOD AUTHORITY.

#### **DISTRIBUTION STATEMENT X:**

DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND PRIVATE INDIVIDUALS OR ENTERPRISES ELIGIBLE TO OBTAIN EXPORT-CONTROLLED TECHNICAL DATA IN ACCORDANCE WITH DOD DIRECTIVE 5230.25, WITHHOLDING OF UNCLASSIFIED TECHNICAL DATA FROM PUBLIC DISCLOSURE, 6 Nov 1984 (Indicate date of determination). CONTROLLING DOD OFFICE IS (Indicate Controlling DoD Office).

The cited documents has been reviewed by competent authority and the following distribution statement is hereby authorized.

OFFICE OF NAVAL RESEARCH CORPORATE PROGRAMS DIVISION (Statement) (Controlling DoD Office Name) ONR 353 800 NORTH QUINCY STREET ARLINGTON, VA 22217-5660 (Reason) (Controlling DoD Office Address, DEBRA T. HUGHES City, State, Zip) DEPUTY DIRECTOR CORPORATE PROGRAMS OFFICE [19 SEP 1995 ignature & Typed Name) (Assigning Office) (Date Statement Assigned)